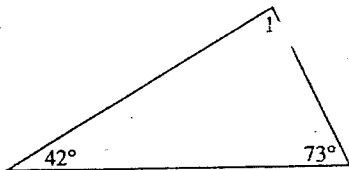


TRIANGLES

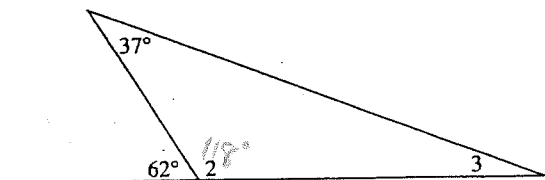
Find the measure of each required angle and give the reason for your answer.

1.



$\angle 1 = 65^\circ$ \angle s in Δ add to 180°

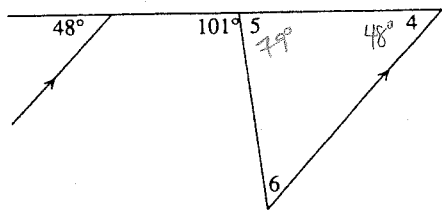
2.



$\angle 2 = 118^\circ$ supplementary

$\angle 3 = 25^\circ$ \angle s in Δ

3.

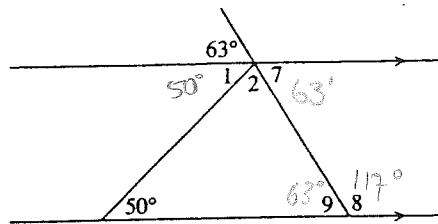


$\angle 4 = 48^\circ$ corresponding

$\angle 5 = 79^\circ$ supplementary

$\angle 6 = 53^\circ$ \angle s in Δ

4.



$\angle 7 = 63^\circ$ vertically opp

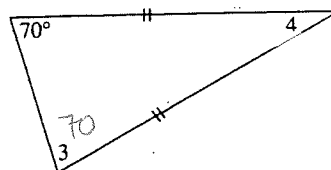
$\angle 8 = 117^\circ$ int \angle s add to 180°

$\angle 9 = 63^\circ$ alt. int.

$\angle 1 = 50^\circ$ alt int

$\angle 2 = 67^\circ$ \angle s on a line

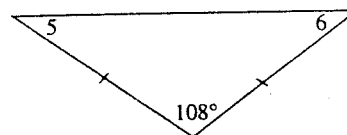
5.



$\angle 3 = 70^\circ$ isosceles

$\angle 4 = 40^\circ$ \angle s in Δ add to 180°

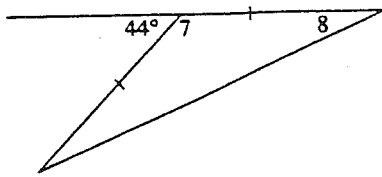
6.



$\angle 5 = 36^\circ$ $\frac{180-108}{2}$ isosceles

$\angle 6 = 36^\circ$ isosceles

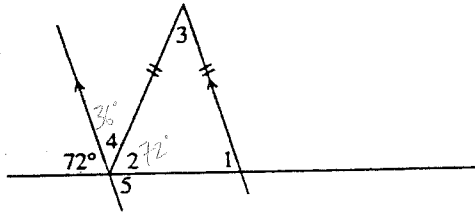
7.



$$\angle 7 = 136^\circ \quad \text{Supplementary}$$

$$\angle 8 = 22^\circ \quad \frac{180-136}{2} \text{ isosceles}$$

8.



$$\angle 1 = 72^\circ \quad \text{corresponding}$$

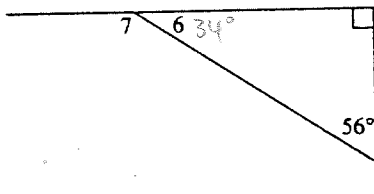
$$\angle 2 = 72^\circ \quad \text{isosceles}$$

$$\angle 3 = 36^\circ \quad \angle\text{s in } \triangle \text{ add to } 180^\circ$$

$$\angle 4 = 36^\circ \quad \angle\text{s on line}$$

$$\angle 5 = 72^\circ \quad \angle\text{s on line}$$

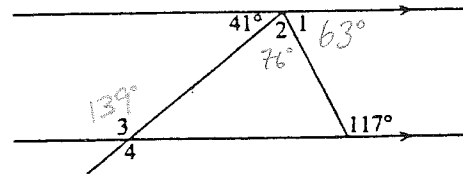
9.



$$\angle 6 = 34^\circ \quad \angle\text{s in } \triangle$$

$$\angle 7 = 146^\circ \quad \text{supplementary}$$

10.



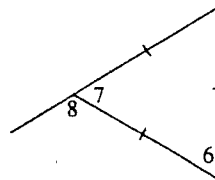
$$\angle 1 = 63^\circ \quad \text{interior } \angle\text{s add to } 180^\circ$$

$$\angle 2 = 76^\circ \quad \angle\text{s on a line}$$

$$\angle 3 = 139^\circ \quad \text{int } \angle\text{s } (180 - 41^\circ)$$

$$\angle 4 = 139^\circ \quad \text{vert. opp.}$$

11.

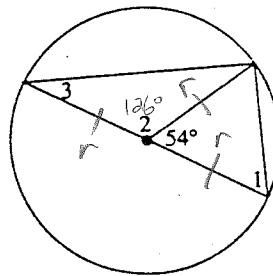


$$\angle 6 = 60^\circ \quad \text{equilateral } \triangle$$

$$\angle 7 = 60^\circ \quad \text{"}$$

$$\angle 8 = 120^\circ \quad \text{supplementary}$$

12.

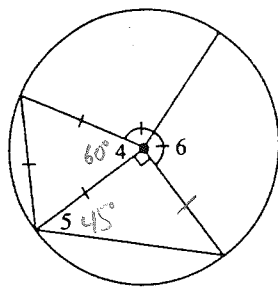


$$\angle 1 = 63^\circ \quad \text{isosc. by radii } \frac{180-54}{2}$$

$$\angle 2 = 126^\circ \quad \text{supplementary}$$

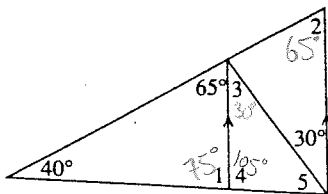
$$\angle 3 = 27^\circ \quad \text{isosc. } \frac{180-126}{2}$$

13.



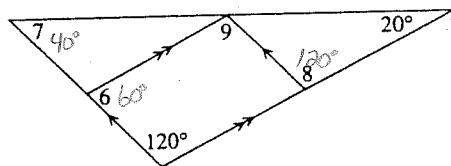
- $\angle 4 = 60^\circ$ equilateral Δ
 $\angle 5 = 45^\circ$ isosc. by radii $\frac{180-90}{2}$
 $\angle 6 = 105^\circ$ \angle s at point add to 360°

14.



- $\angle 1 = 75^\circ$ \angle s in Δ
 $\angle 2 = 65^\circ$ corresponding
 $\angle 3 = 30^\circ$ alt interior
 $\angle 4 = 105^\circ$ \angle s on a line
 $\angle 5 = 45^\circ$ \angle s in Δ

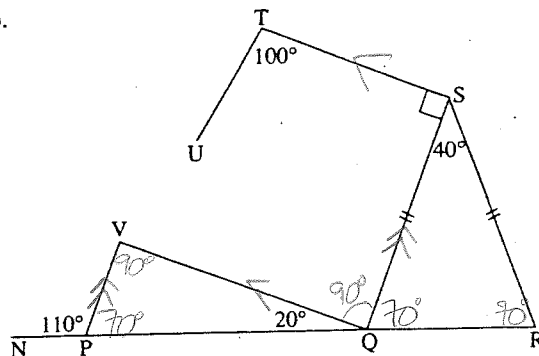
15.



- $\angle 6 = 60^\circ$ int. angles
 $\angle 7 = 40^\circ$ \angle s in Δ $180-120-20$
 $\angle 8 = 120^\circ$ corresponding
 $\angle 9 = 120^\circ$ opp \angle s of parallelogram

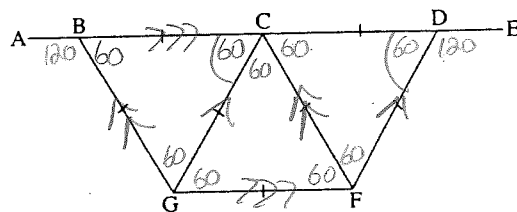
Name all the pairs of parallel segments in each figure.
State the reason for your answer.

16.



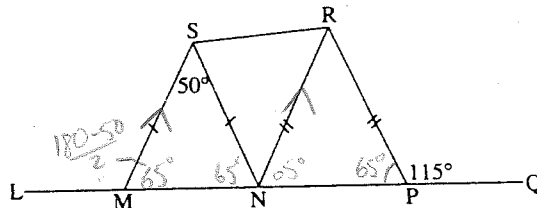
- $TS \parallel QU$ int \angle s add to 180° ($90+90$)
 $PV \parallel QS$ corresponding $= 70^\circ$
 n/a

17.



- $CG \parallel DF$ corresponding \angle s $= 60^\circ$
 $BG \parallel CF$ " " "
 $AE \parallel GF$ int \angle s add to 180°

18.



- $MS \parallel NR$ corresponding \angle s $= 65^\circ$
 $NS \parallel PR$ corresponding \angle s $= 65^\circ$
 n/a